

CLAIMS

1. A polyester resin aqueous dispersion, comprising:
a polyester resin (A) having an acid value of 2 mg KOH/g or
5 more and less than 8 mg KOH/g and a number-average
molecular weight of 5,000 or more; a basic compound (B);
and water (C), wherein the content of the polyester resin
(A) is 1 to 70 percent by mass, the content of water (C) is
10 percent by mass or more, and no surfactant is contained.

10 2. The polyester resin aqueous dispersion according
to Claim 1, further comprising an organic solvent (D),
wherein the content of the organic solvent (D) is 0 to 85
percent by mass.

15 3. The polyester resin aqueous dispersion according
to claim 1 or 2, wherein the volume-average particle size
of the particles in the polyester resin aqueous dispersion
is 400 nm or less.

20 4. The polyester resin aqueous dispersion according
to any one of claims 1 to 3, wherein the polyester resin is
a polyester resin having carboxyl groups introduced by
using a polybasic acid in a depolymerization reaction
and/or an addition reaction.

25 5. The polyester resin aqueous dispersion according
to claim 4, wherein the polybasic acid is a trifunctional
or higher polybasic acid.

6. The polyester resin aqueous dispersion according to any one of claims 1 to 5, wherein the polyester resin is a polyester resin containing an aromatic polybasic acid in an amount of 50 mole % or more as the polybasic acid component.

7. A process for producing the polyester resin aqueous dispersion according to any one of claims 1 to 6, comprising;

dispersing a solution of a polyester resin (A) in an organic solvent together with a basic compound (B) in water by phase-inversion emulsification, wherein the phase-inversion emulsification is carried out at a temperature of 40°C or lower.

8. The process for producing the polyester resin aqueous dispersion according to Claim 7, further comprising;

removing the organic solvent after the phase-inversion emulsification.

9. The process for producing the polyester resin aqueous dispersion according to Claim 7 or 8, wherein the amount of the basic compound (B) used satisfies the following Formula (1):

$$-0.25 \times E + 2.5 \leq F \leq -5 \times E + 50 \quad (1)$$

wherein in the formula (1) E represents an acid value of the polyester resin (A) (mg KOH/g); and F represents an

equivalence ratio of the basic compound (B) to the total mole quantity of the carboxyl groups of polyester resin (A).